

=> s l1

SAMPLE SEARCH INITIATED 15:15:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1301 TO ITERATE

100.0% PROCESSED 1301 ITERATIONS
SEARCH TIME: 00.00.01

4 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 23857 TO 28183
PROJECTED ANSWERS: 4 TO 200

L2 4 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 15:16:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 25546 TO ITERATE

100.0% PROCESSED 25546 ITERATIONS
SEARCH TIME: 00.00.02

89 ANSWERS

L3 89 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.33

161.54

FILE 'CAPLUS' ENTERED AT 15:16:05 ON 13 OCT 2005
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FILE COVERS 1907 - 13 Oct 2005 VOL 143 ISS 16
FILE LAST UPDATED: 12 Oct 2005 (20051012/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

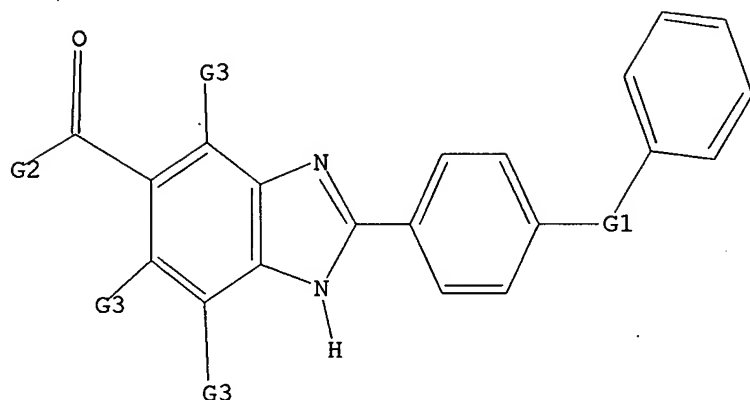
<http://www.cas.org/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 27 L3

=> d ed abs ibib hitstr 1-27

G1 CF₂, SO₂, AkG2 OH, NH₂

G3 H, Me, X

Structure attributes must be viewed using STN Express query preparation.

=> s 110

SAMPLE SEARCH INITIATED 13:25:53 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 704 TO ITERATE

100.0% PROCESSED 704 ITERATIONS
 SEARCH TIME: 00.00.01

2 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 12489 TO 15671
 PROJECTED ANSWERS: 2 TO 124

L11 2 SEA SSS SAM L10

=> s 110 full

FULL SEARCH INITIATED 13:25:58 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 14068 TO ITERATE

100.0% PROCESSED 14068 ITERATIONS
 SEARCH TIME: 00.00.02

54 ANSWERS

L12 54 SEA SSS FUL L10

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
166.49	780.80

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-41.61

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FILE 'CAPLUS' ENTERED AT 13:26:05 ON 13 OCT 2005
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FILE COVERS 1907 - 13 Oct 2005 VOL 143 ISS 16
FILE LAST UPDATED: 12 Oct 2005 (20051012/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l12

L13 3 L12

=> d ed abs ibib hitstr 1-3

L13 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 06 Nov 2004

AB The discovery of a series of novel, potent, and highly selective inhibitors of the DNA damage control kinase chk2 is disclosed. Here we report the first SAR study around inhibitors of this kinase. High-throughput screening of purified human chk2 led to the identification of a novel series of 2-arylbenzimidazole inhibitors of the kinase. Optimization was facilitated using homol. models of chk2 and docking of inhibitors, leading to the highly potent 2-arylbenzimidazole 2h (IC50 15 nM). Compound 2h is an ATP-competitive inhibitor of chk2 that dose dependently protects human CD4+ and CD8+ T-cells from apoptosis due to ionizing radiation. This work suggests that a selective small mol. inhibitor of chk2 could be a useful adjuvant to radiotherapy, increasing the therapeutic window of such treatment.

ACCESSION NUMBER: 2004:930363 CAPLUS

DOCUMENT NUMBER: 142:211393

TITLE: Checkpoint Kinase Inhibitors: SAR and Radioprotective Properties of a Series of 2-Arylbenzimidazoles
 AUTHOR(S): Arienti, Kristen L.; Brunmark, Anders; Ase, Frank U.; McClure, Kelly; Lee, Alice; Blevitt, Jon; Neff, Danielle K.; Huang, Liming; Crawford, Shelby; Pandit, Chennagiri R.; Karlsson, Lars; Breitenbucher, J. Guy
 CORPORATE SOURCE: Johnson Johnson Pharmaceutical Research and Development L.L.C., San Diego, CA, 92121, USA
 SOURCE: Journal of Medicinal Chemistry (2005), 48(6), 1873-1885
 CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

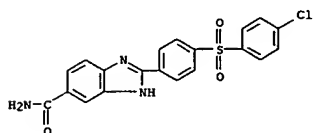
DOCUMENT TYPE: Journal

LANGUAGE: English

IT 516481-60-0P, 2-[(4-(4-Chlorobenzoylsulfonyl)phenyl)-1H-benzimidazole-5-carboxylic Acid Amide
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (checkpoint kinase inhibitors with SAR and radioprotective properties of a series of 2-arylbenzimidazoles)

RN 516481-60-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-(4-chlorophenyl)sulfonyl)phenyl]- (9CI) (CA INDEX NAME)



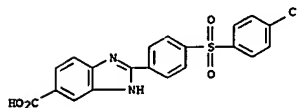
IT 516481-61-1P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (checkpoint kinase inhibitors with SAR and radioprotective properties of a series of 2-arylbenzimidazoles)

RN 516481-61-1 CAPLUS

L13 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CN 1H-Benzimidazole-5-carboxylic acid, 2-[(4-(4-chlorophenyl)sulfonyl)phenyl]- (9CI) (CA INDEX NAME)



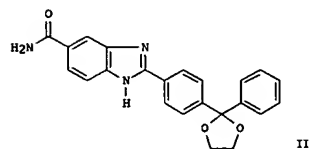
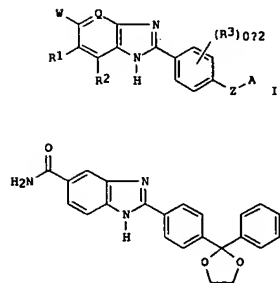
REFERENCE COUNT: 28

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 29 Oct 2004

GI



AB The invention relates to a preparation of benzimidazole and imidazo[4,5]pyridine derivs. of formula I [wherein: W is CO2H, C(O)NH2, or SO2NH2; Q is N or CH; R1 and R2 are independently selected from H and halogen; Z is C(O), CF2, C=CH2, or CH2, etc.; A is -SO2-piperidinyl derivative, SO2 is attached to the N of piperidinyl; R3 is absent or independently selected from OH, CF3, alkyl, or NO2, etc.], useful as inhibitors of Cdc1 and useful as adjuvants to chemotherapy or radiation therapy in the treatment of cancer. For instance, benzimidazole derivative II (IC50 = 55 nM) was prepared via heterocyclization of 3,4-diaminobenzamide and 4-(2-phenyl-1,3-dioxolan-2-yl)benzaldehyde with a yield of 63% (example 1).

ACCESSION NUMBER: 2004:905625 CAPLUS

DOCUMENT NUMBER: 141:366232

TITLE: A preparation of benzimidazole and imidazo[4,5]pyridine derivatives, useful as Cdc1 inhibitors

INVENTOR(S): Ameriks, Michael K.; Arienti, Kristen L.; Ase, Frank U.; Breitenbucher, J. Guy

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 54 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004214857	A1	20041028	US 2004-825823	20040416
WO 2004093873	A1	20041104	WO 2004-US11775	20040416
V: AE, AG, AL, AM, AT, AU, AZ, BA, BG, BR, BV, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, ND, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: MARPAT 141:366232 US 2003-463542P P 20030417

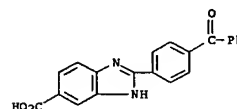
OTHER SOURCE(S):

IT 780776-28-5P, 2-(4-Benzoylphenyl)-1H-benzimidazole-5-carboxylic acid

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate: preparation of benzimidazole or imidazo[4,5]pyridine derivs., useful as Cdc1 inhibitors)

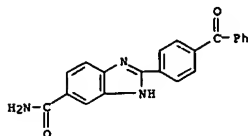
RN 780776-28-5 CAPLUS

CN 1H-Benzimidazole-5-carboxylic acid, 2-(4-benzoylphenyl)- (9CI) (CA INDEX NAME)

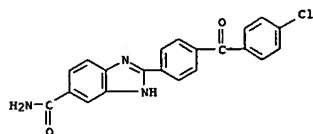


IT 780776-26-3P, 2-(4-Benzoylphenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-30-9P, 2-[(4-(4-Chlorobenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-38-7P, 2-[(4-(4-Methylbenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-39-8P, 2-[(4-(4-Methoxybenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-40-1P, 2-[(4-(Naphthalene-2-carbonyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-42-3P, 2-[(4-(4-Chloro-3-trifluoromethylbenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-44-5P, 2-[(4-(3-Bromo-4,5-dimethoxybenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-49-0P, 2-[(4-(3,4-Dichlorobenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-52-6P, 2-[(4-(4-Ethylbenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-55-8P 780776-58-1P 780776-69-4P, 2-[(4-(Hydroxyphenylmethyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-71-8P, 2-[(4-[(4-Chlorophenyl)hydroxymethyl]phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-77-4P, 2-[(4-(Hydroxynaphthalen-2-ylmethyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-85-4P 780776-88-7P, 2-[(4-[(4-Ethylphenyl)hydroxymethyl]phenyl)-1H-benzimidazole-5-carboxylic acid amide 780776-92-3P, 2-[(4-(2,3-Dihydrobenzo[1,4]dioxin-6-yl)-hydroxymethyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780777-55-1P 780777-60-8P, 2-[(4-(2,4-Dichlorobenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780777-62-0P, 2-[(4-(2-Methoxybenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780777-64-2P, 2-[(4-(2-Methylbenzoyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide 780777-68-7P, 2-[(4-[(6-Chlorobenzof[1,3]dioxol-5-yl)-hydroxymethyl]phenyl)-1H-benzimidazole-5-carboxylic acid amide 780777-75-5P 780777-76-6P, 2-[(4-(Hydroxy-tolylmethyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide

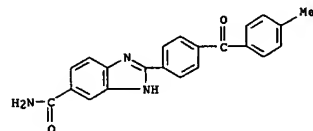
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (prepn. of benzimidazole or imidazo[4,5]pyridine derivs., useful as Cds1 inhibitors)
 RN 780776-26-3 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(benzoyl)phenyl]- (9CI) (CA INDEX NAME)



RN 780776-30-9 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(4-chlorobenzoyl)phenyl]- (9CI) (CA INDEX NAME)

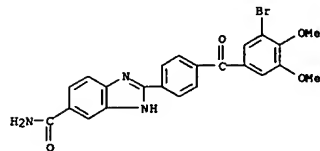


RN 780776-38-7 CAPLUS
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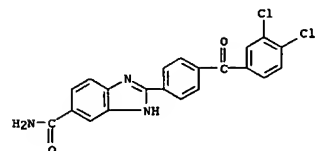


RN 780776-39-8 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(4-methoxybenzoyl)phenyl]- (9CI) (CA INDEX NAME)

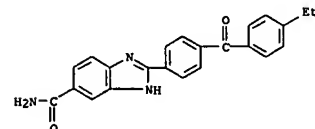
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 780776-49-0 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(3,4-dichlorobenzoyl)phenyl]- (9CI) (CA INDEX NAME)

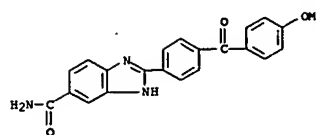


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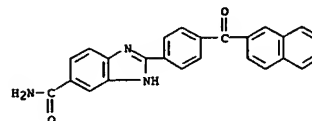


RN 780776-55-8 CAPLUS
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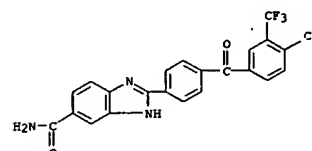
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 780776-40-1 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(2-naphthalenylcarbonyl)phenyl]- (9CI) (CA INDEX NAME)

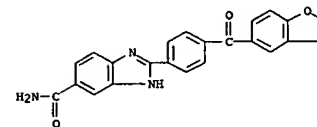


RN 780776-42-3 CAPLUS
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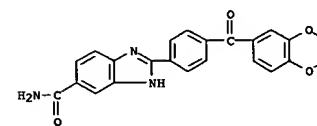


RN 780776-44-5 CAPLUS
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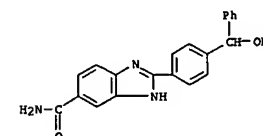
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



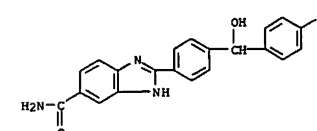
RN 780776-58-1 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-((2,3-dihydro-1,4-benzodioxin-6-yl)carbonyl)phenyl]- (9CI) (CA INDEX NAME)



RN 780776-69-4 CAPLUS
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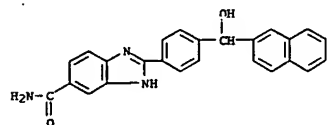


RN 780776-71-8 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-((4-chlorophenyl)hydroxymethyl)phenyl]- (9CI) (CA INDEX NAME)

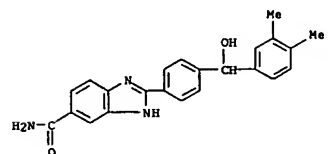


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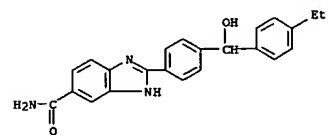
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(hydroxy-2-naphthalenylmethyl)phenyl]- (9CI) (CA INDEX NAME)



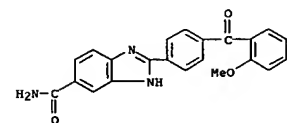
RN 780776-85-4 CAPLUS
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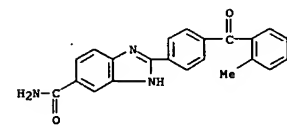
RN 780776-88-7 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(4-ethylphenyl)hydroxymethyl]phenyl]- (9CI) (CA INDEX NAME)



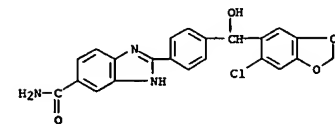
RN 780776-92-3 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)hydroxymethyl]phenyl]- (9CI) (CA INDEX NAME)



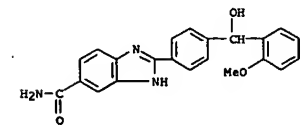
RN 780777-64-2 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(2-methylbenzoyl)phenyl]- (9CI) (CA INDEX NAME)



RN 780777-69-7 CAPLUS
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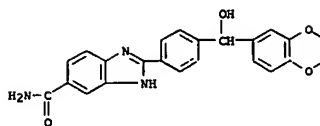


RN 780777-75-5 CAPLUS
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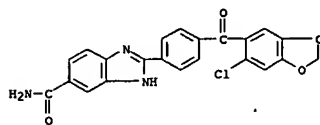


RN 780777-76-6 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-[hydroxy(2-

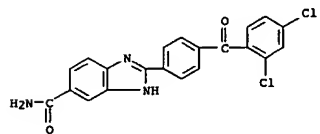
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 780777-55-1 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(6-chloro-1,3-benzodioxol-5-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)

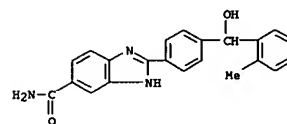


RN 780777-60-8 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(2,4-dichlorobenzoyl)phenyl]- (9CI) (CA INDEX NAME)



RN 780777-62-0 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[4-(2-methoxybenzoyl)phenyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

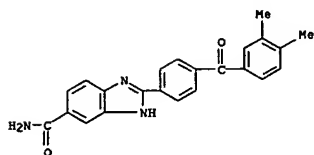


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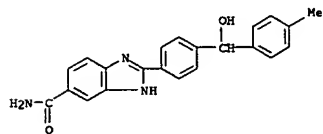
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 (preparation of benzimidazole or imidazo[4,5]pyridine derivs., useful as Csd1 inhibitors)

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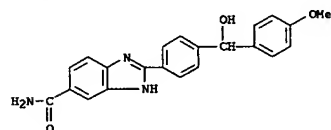
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



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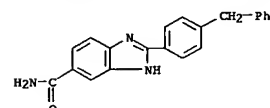


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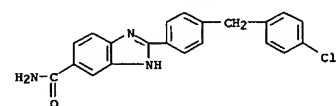


RN 780776-79-6 CAPLUS
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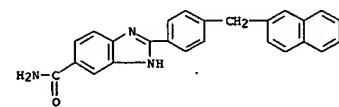
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



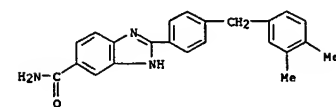
RN 780777-02-8 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[(4-{(4-chlorophenyl)methyl}phenyl)]phenyl]- (9CI) (CA INDEX NAME)



RN 780777-04-0 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[(4-{(2-naphthalenyl)methyl}phenyl)]phenyl]- (9CI) (CA INDEX NAME)

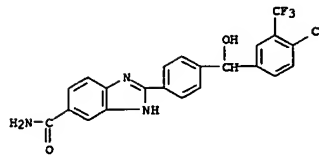


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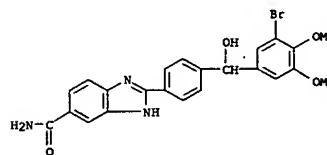


RN 780777-08-4 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[(4-{(4-ethylphenyl)methyl}phenyl)]phenyl]- (9CI) (CA INDEX NAME)

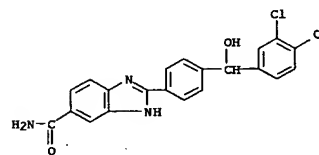
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 780776-81-0 CAPLUS
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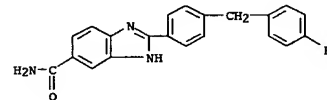


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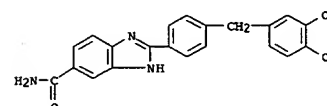


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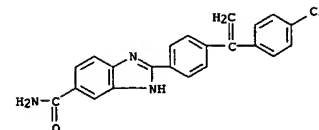
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



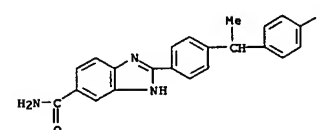
RN 780777-10-8 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[(4-{(2,3-dihydro-1,4-benzodioxin-6-yl)methyl}phenyl)]phenyl]- (9CI) (CA INDEX NAME)



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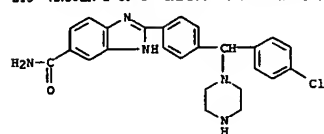


RN 780777-18-6 CAPLUS
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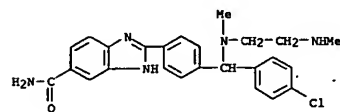


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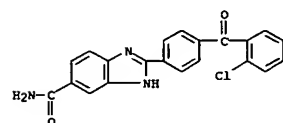
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



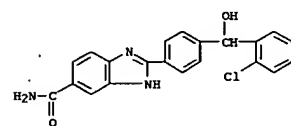
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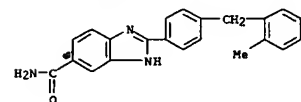
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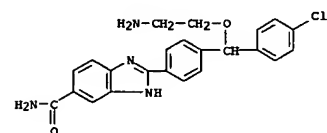
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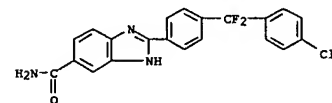
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



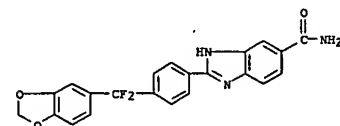
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CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(2-aminoethoxy)(4-chlorophenyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



RN 780778-71-4 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(4-chlorophenyl)difluoromethyl]phenyl]- (9CI) (CA INDEX NAME)



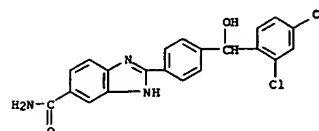
RN 780778-73-6 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(1,3-benzodioxol-5-yl)difluoromethyl]phenyl]- (9CI) (CA INDEX NAME)



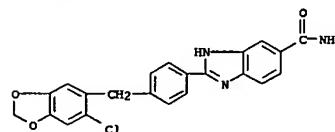
RN 780778-75-8 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(4-chlorophenyl)-1-methylethyl]phenyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

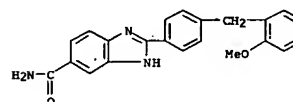
RN 780777-73-3 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(2,4-dichlorophenyl)hydroxymethyl]phenyl]- (9CI) (CA INDEX NAME)



RN 780777-78-8 CAPLUS
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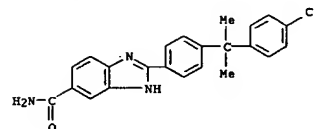


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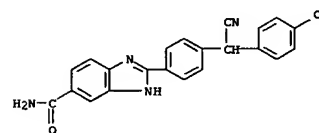


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CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(2-methylphenyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

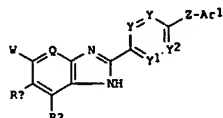
L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 780778-77-0 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(4-chlorophenyl)cyanomethyl]phenyl]- (9CI) (CA INDEX NAME)



L13 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS ON STN
 ED Entered STN: 25 Apr 2003
 GI



AB 2-Aryl-substituted benzimidazoles and imidazo[4,5]pyridines (shown as I; e.g. 2-[(4-(4-chlorophenoxy)phenyl)-1H-benzimidazole-5-carboxylic acid amide (II)] are disclosed as inhibitors of Cds1 and useful as adjuvants to chemotherapy or radiation therapy in the treatment of cancer. For I: W is COOH, -C(O)NHR1, or -SO2NHR1 (R1 is H or C1-4alkyl); Q is N or CH; Ra and Rb are H or halogen; Y, Y1 and Y2 = N and C-Rc with the proviso that O, 1 or 2 of Y, Y1 and Y2 are N and at least 2 of Rc must be H; Rc = -H, -OH, -C1-6alkyl, -SCF3, halo, -CF3 and -OCF3; Z = O, S, SO, SO2, SO2NR2, NR2SO2, NH, CONR2, piperazinediyl or a covalent bond; R2 is H or C1-4alkyl; Ar1 is an aromatic group as defined in the claims. IC50 values are reported for inhibition of human Cds1 checkpoint kinase by 103 examples of I, e.g. 3 nM for 2-[(4-(4-chloro-3-trifluoromethylphenoxy)phenyl)-1H-benzimidazole-5-carboxylic acid amide. Addnl. studies were (i) determination of the effect of II on tumor cell line clonogenic survival, (ii) effect of II on tumor growth in murine xenograft models, (iii) determination of the effect of 14 examples of I on radiation-induced apoptosis in isolated primary cells, and (iv) determination of the effect of II on radiation-induced apoptosis in splenocytes in vivo. Although the methods of preparation are not claimed, approx. 100 example preps. are included.

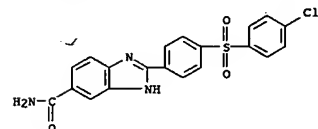
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 DOCUMENT NUMBER: 138:338144
 TITLE: Preparation of 2-phenyl benzimidazoles and imidazo[4,5]pyridines as Cds1/Chk2-inhibitors and adjuvants to chemotherapy or radiation therapy in the treatment of cancer
 INVENTOR(S): Arlenti, Kristen L.; Axe, Frank U.; Breitenbucher, J. Guy; Huang, Liming; Lee, Alice; McClure, Kelly J.
 PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
 SOURCE: PCT Int. Appl., 144 pp.
 CODEN: PINKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003032984	A1	20030424	WO 2002-US33371	20021018
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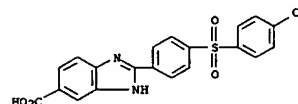
Did not design US.

L13 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
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 WO 2002-US33371 W 20021018
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 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (drug candidate; preparation of benzimidazoles and imidazopyridines as Cds1/Chk2-inhibitors and adjuvants to chemotherapy or radiation therapy in treatment of cancer)
 RN 516481-61-1 CAPLUS
 CN 1H-Benzimidazole-5-carboxylic acid, 2-[(4-(4-chlorophenyl)sulfonyl)phenyl]- (9CI) (CA INDEX NAME)



IT 516481-60-0P, 2-[(4-(4-Chlorobenzenesulfonyl)phenyl)-1H-benzimidazole-5-carboxylic acid amide
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of benzimidazoles and imidazopyridines as Cds1/Chk2-inhibitors and adjuvants to chemotherapy or radiation therapy in treatment of cancer)
 RN 516481-60-0 CAPLUS
 CN 1H-Benzimidazole-5-carboxamide, 2-[(4-(4-chlorophenyl)sulfonyl)phenyl]- (9CI) (CA INDEX NAME)

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
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CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 13:26:33 ON 13 OCT 2005